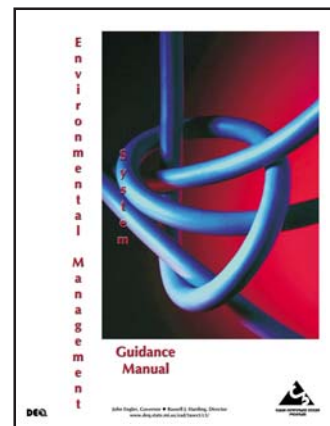

CHAPTER 8: What is an Environmental Management System?

An Environmental Management System (EMS) is a voluntary system for identifying, controlling, and monitoring the activities at your facility that could impact the environment. It is a system that encourages your facility to make environmental issues an everyday part of your business. It helps you take a proactive rather than reactive approach to your environmental programs and address impacts that may not be regulated, impacts such as excess energy use or use of resources. An EMS provides you with a structure for overseeing your programs. It does not, however, tell you what to manage. You make the decisions on what to manage based on your business needs, your resources, and your identification of significant activities. The idea is to integrate all of your environmental responsibilities into the daily decision making and overall management of operations at your facility to increase effectiveness and efficiency. Use of an EMS is completely voluntary; there are no compliance regulations in Michigan that require the implementation of an EMS.



Major industry originally developed the idea of EMS to improve environmental performance beyond that required by regulation, to create a more “level playing ground” in environmental control in the world market, to provide a competitive advantage, and to give credibility to environmental programs. An EMS is practical for, and applicable to, even the smallest businesses and organizations that wish to improve environmental performance. Voluntary implementation of EMS by industry and organizations is increasing in Michigan and throughout the world.

There is no one type of EMS, but there are standards or formats that you can follow in developing your system. The business community developed these standards for environmental management to provide consistency and credibility for the use of EMS. The most well-known and widely used EMS standard in the United States and the world is the ISO 14001 standard. The International Organization for Standardization (ISO), consisting of representatives from industry, government, non-governmental organizations, and other entities, finalized the ISO

14001 EMS standard in September 1996. The intent of this standard is to produce a single framework for any EMS which can accommodate varied applications all over the world. It is a standard that is harmonizing environmental management practices and requirements around the globe. All EMS standards, however, have these same basic components:

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- Management commitment to environmental protection (including the allocation of resources and time and the assignment of responsibility).

- A policy statement (including a commitment to compliance, pollution prevention, and continuous improvement).
- An analysis of environmental impact and legal requirements.
- A statement of goals/objectives/targets and initiatives.
- A control and improvement plan.
- A management review system.

Some of the elements of a typical EMS include:

- Compliance and system auditing
- Operational control through work instructions and procedures
- Employee environmental training
- Emergency response planning
- Environmental record keeping and reporting.

You most likely have programs and documents that satisfy most of these common elements. Now you will only need to formalize your procedures and documents so your programs can be managed in a logical and accessible manner. The system provides the basic framework for your program, but you tailor it to your facility and needs.

Although not a requirement of any regulatory compliance program, an in-place EMS is one of the three criteria that you must meet to apply for Clean Corporate Citizen (C3) designation in Michigan. The C3 Program is a voluntary initiative that offers regulatory flexibility and public recognition to facilities demonstrating performance in three areas: (1) EMS, (2) implementation of a pollution prevention (P2) program, and (3) compliance with all applicable state environmental regulations.

Implementation of an EMS does not substitute for compliance with regulations but can improve your compliance record and help you address issues that are not covered by regulation. In short, environmental management is an ongoing improvement process propelled by the desire to comply with regulations and operate cost effectively. Fully developing and integrating an EMS into your day-to-day management processes and operations is a more effective way of doing business. EMS and C3 point to improved environmental performance at your facility and the benefits derived from that improved performance.

8.1 What are the Benefits of an EMS?

Developing an EMS for your Michigan business can help qualify your facility for C3 designation. Once you receive this designation, you automatically qualify for regulatory benefits, positive public recognition for your efforts, and improved cooperation and environmental awareness among your employees. As a C3 designee, your facility can take advantage of benefits from the state's air, surface water, groundwater, and storage tank programs.

Your facility can reap numerous benefits from EMS development even without C3 designation. These benefits include:

- **Reduced costs** – Facilities that have implemented EMS report improved operating efficiency through focus on important issues, development of standard procedures, and increased employee training. Most companies have reported reduced energy costs and waste disposal costs through the systematic process of identifying potential impacts. Some facilities have been given lower liability insurance rates and lower loan rates after developing an EMS because they have reduced their legal liability and likelihood of catastrophic occurrences.
- **Competitive advantage** – There is an expanding “green” market in the United States. Consumers and manufacturers are giving preference to products from environmentally responsible suppliers. An EMS can help you obtain that “green” image. A number of larger companies in the United States, especially in the automotive and electronic fields, have developed EMSs and are now suggesting that their suppliers implement EMSs. In some markets, like Japan and the European Economic Union, you are required to have an EMS to do business.
- **Improved image** – An EMS can improve your image and give credibility to your environmental programs. Your local community, environmental regulators, and environmental groups see EMS development as an indication of your willingness to be a responsible citizen and go beyond compliance. Accordingly, they will recognize and reward your efforts.
- **Enhanced regulatory compliance** – An EMS can help you improve regulatory compliance and reduce your liability from noncompliance. The adoption of procedures and work instructions and additional training will add consistency and stability to your environmental programs. It will lead to improved control over your potential impacts and help you anticipate and control upsets.
- **Improved environmental performance** – The systematic identification of your potential environmental impacts and the on-going setting of goals to control those impacts are important parts of an EMS. Many of your goals will likely involve energy and waste reduction and pollution prevention. Achieving these goals will ultimately lead to improved performance and a cleaner environment. Plus, an EMS can help you measure the social, economic, and environmental benefits of your environmental control programs.

8.2 Where To Go For Help

SUBJECT	EMS Development and Michigan's Clean Corporate Citizen (C3) Program
CONTACT	DEQ, Environmental Science and Services Division
TELEPHONE	(800) 662-9278
WEB SITE	www.michigan.gov/
SUBJECT	EMS Guidebooks "Environmental Management System Guidance Manual"
CONTACT	DEQ, Environmental Science and Services Division
TELEPHONE	(800) 662-9278
WEB SITE	www.michigan.gov/deq
SUBJECT	EMS Standards
CONTACT	American National Standards Institute (ANSI)
TELEPHONE	(212) 642-4900
WEB SITE	www.ansi.org
SUBJECT	EMS Standards
CONTACT	Registrar Accreditation Board (RAB)
TELEPHONE	(888) 722-2440
WEB SITE	www.rabnet.com/index.shtml
SUBJECT	Organizations
CONTACT	U.S. Environmental Protection Agency (USEPA)
TELEPHONE	(202) 260-7726
WEB SITE	www.epa.gov/reinvent/ems